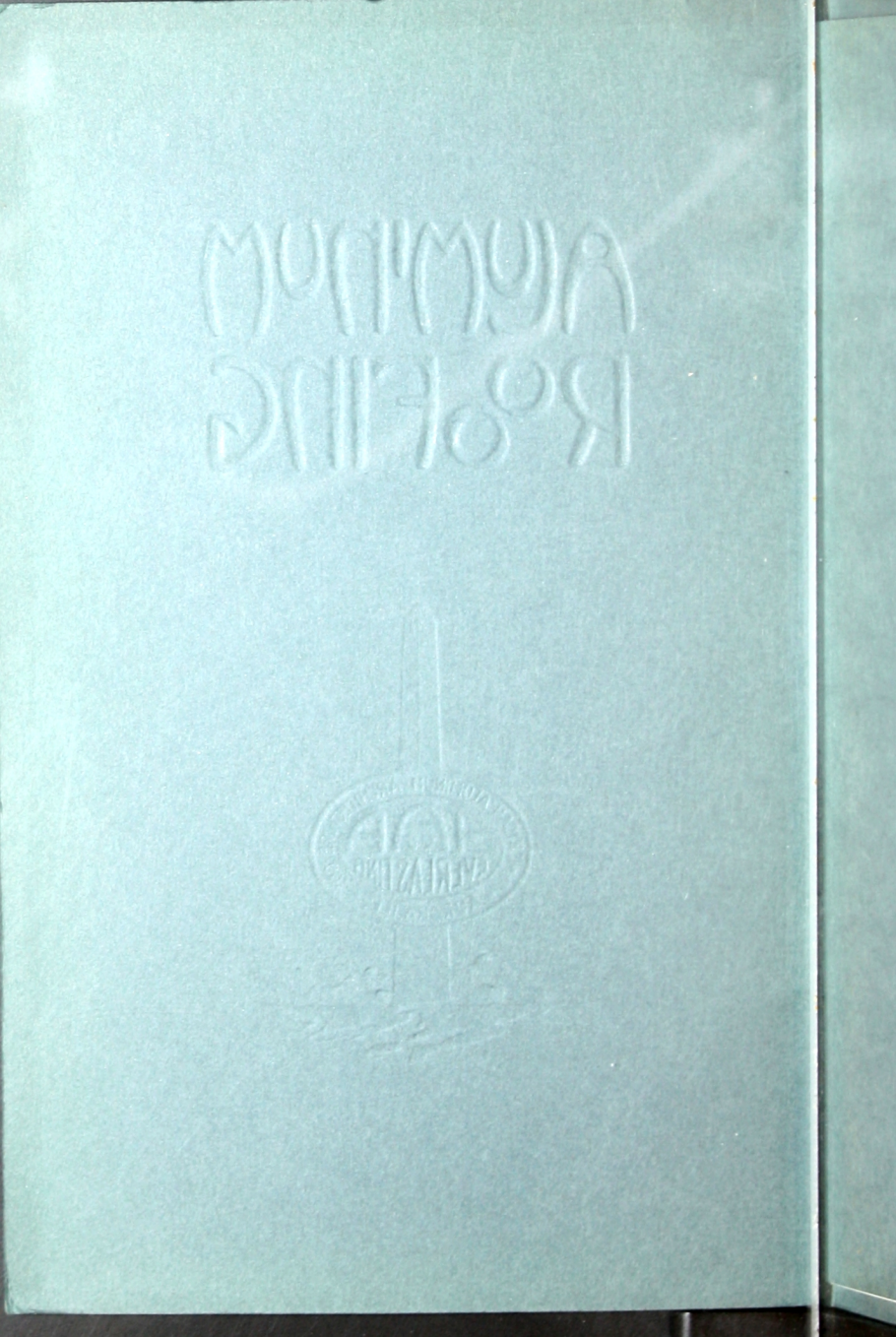
ALUMINUM ROOFING



Aluminum Caps
The
Washington Monument

AMERICAN ALUMINUM ARCHITECTURE CO.

AURORA, ILL. U.S.A.

Originators of
Aluminum Roofing and of
the use of Aluminum in
Building Construction

Manufacturers of
Shingles, Corrugated Roofing, Ridges, Hips,
Valleys, Starters, Flashings, Etc.
ALL IN ALUMINUM

THE ROOF INDESTRUCTIBLE

REDUCED cost of manufacture, constantly broadening the commercial uses of aluminum, has made possible aluminum roofing — at once permanent, ornate and without maintenance cost. The need has long been felt of a practicable roofing material which will endure, the expense of which is moderate and when once paid is paid for all time. Aluminum fills the bill in every particular.

The recognized problems attending its use have been solved and we are able to offer a practical aluminum roofing which is 100% efficient. The permanent roof has arrived — fire-proof, rust-proof, weather-proof, hail-proof, water-proof, acid-proof, buckle-proof, sweat-proof, a protection against lightning, and practically indestructible — in a word, TIME-PROOF.

Commercial Aluminum

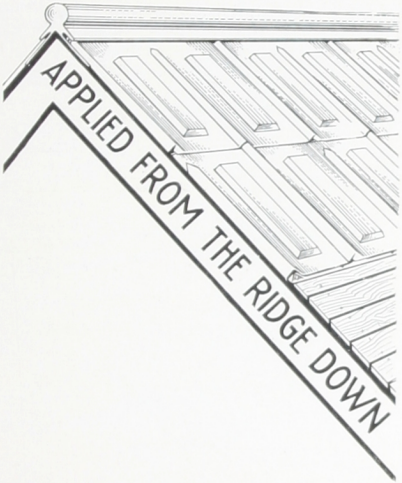
The use of aluminum in the industrial and household arts has grown with great rapidity during recent years. The valuable qualities of this remarkable metal have been known for more than a century but until recently its general use has been prevented by the high cost of production. When a method finally was discovered for extracting the metal from the basic clay or rock by electrolytic processes instead of through chemical agencies, the reduced cost of production made this most valuable metal available commercially.

Aluminum Roofing

The two outstanding qualities of aluminum make the metal invaluable for roofing purposes,—namely, its lightness and the great resistance it offers to the elements. That its use for roofing ultimately would follow was inevitable. Since time began, of the various other materials employed as roof coverings, not one could be considered 100% efficient. They rot, corrode, rust, dry out, crack, peel, curl, leak or otherwise deteriorate. Practically all require costly upkeep.

In the year 1918 one of the founders of this company, who for many years had been connected with the roofing industry in both its manufacture and application, suddenly associated aluminum with roofing.

There were problems to be solved in the use of this metal for the purpose named. Its great expansive and contractive qualities preclude the use of tight joints, as if so constructed the roof plates would buckle and tear apart. Soldering is out of the question, on account of the extremely high temperature needed to solder properly, as well as the excessive cost of material.



The full solution of these problems has been found in so-called "shingles" which are made by forming the plates with suitable locks and flanges to interlock one with another.

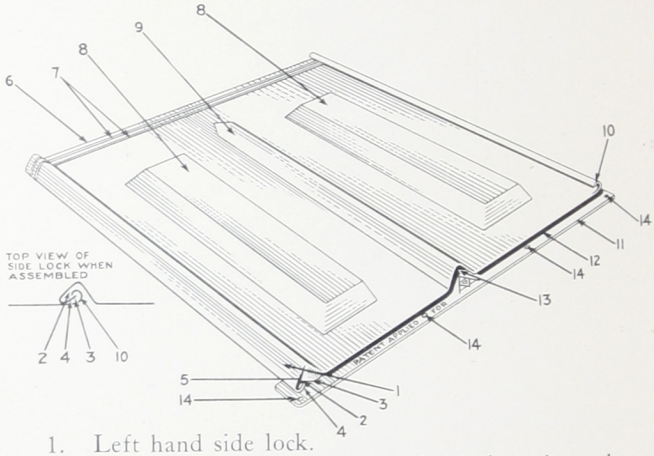
Ridgdown Shingles

One of the real forward steps in building construction is our plan for laying a shingle roof downward from the ridge. This type of aluminum shingle has been aptly named the "RIDGDOWN." By its use scaffolding is entirely eliminated, all that is necessary being a foot support nailed to the roof deck five or six feet below the ridge, which is moved downward as the work progresses.

By constructing a roof as described above with the RIDGDOWN shingle no holes are made in the shingle by driving nails through them to support scaffolding, and the roofing is entirely protected from the weight of the workmen. This is a very important feature as roofing frequently is injured by stepping on it during the application.

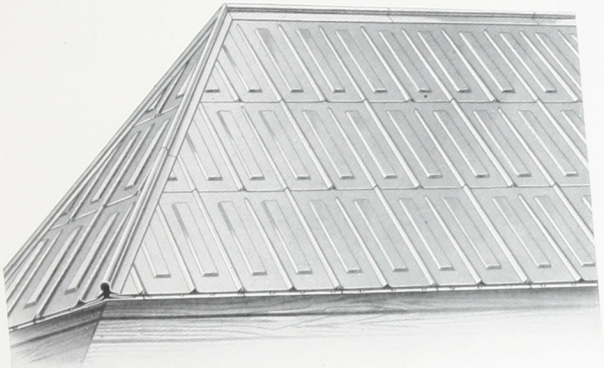
RIDGDOWN SHINGLES

"The 14 Points" of the Aluminum Ridgdown Shingle



1. Left hand side lock.
2. Opening providing for air circulation throughout the lock.
3. Portion of left hand lock which slides up into right hand (curved) lock.
4. Corrugation preventing two flat surfaces from meeting thus allowing perfect air circulation.
5. Lock-Shutter.
6. Curved tip of shingle providing for expansion.
7. Corrugations providing for air circulation in the pocket.
8. Ornamental embossments giving rectangular tile effect.
9. Embossed extended center portion of lock-receiver to form part of design.
10. Right hand side lock.
11. Extended apron for nailing.
12. Pocket for receiving top of shingle below, which also covers the nails.
13. Receiver for side locking device of lower adjoining shingles, (locking and interlocking).
14. Marks for nail holes.

MADE OF ALUMINUM



Portion of Ridgdown Shingle Roof

How Put On

Aluminum ridges, hips, valleys and starters are furnished, having suitable folds for the reception of the shingles. Ridges and valleys are first put into place, then the shingles in the top row are applied. The bottom or apron of the shingle is nailed to the roof board. It is provided with a fold into which the top of the next lower shingle is inserted, thus the nail heads are covered. Both sides and ends are locked automatically as seen in the RIDGDOWN illustration.

The top of the shingle, which is shoved up into the lock of the shingle above, is provided with corrugations acting as an expansion joint, as well as permitting a constant air circulation. Air circulation is also provided through the side-locks.

One of the most important features of the RIDGDOWN shingle is the side-locking device. This is so constructed that, no matter whether experienced craftsmen or men with no experience in the application of metal shingles apply

them, it automatically locks the shingles making it impossible for them to come apart. When one shingle has been placed the next one will slide into the side of the first and firmly interlock.

Because the RIDGDOWN shingle can be applied only in the right way it makes an ideal commercial product.

Progress in Roof Construction

This great stride in the application of metal shingles marks a new era in the roofing industry. The RIDGDOWN shingle is the first and only one of its kind in the world. It is of simple though ingenious construction and a great money-saver because of its simplicity and the small amount of equipment necessary for its application.

The exposed surface of the RIDGDOWN shingle is twelve by fourteen inches. Eighty-six shingles are required per square, (covering 100 sq. ft.) The weight is 40 pounds per square. The shingles, with necessary aluminum nails and instructions for application, are packed in corrugated cartons, each containing sufficient roofing to cover 100 sq. ft.

Aluminum Corrugated Roofing

Because of the permanent qualities of aluminum, we manufacture and recommend ALUMINUM CORRUGATED ROOFING for factory buildings, farm barns, etc. This roofing will be manufactured and assembled at our plant ready for application.

Authoritative Endorsements

The following is an excerpt from a letter from U. S. Department of Commerce, Bureau of Standards, Washington, D. C., dated Sept. 13th, 1921: "We have your letter of Sept. 10th regarding aluminum roofing and note that

you are providing aluminum shingles applied with a double lock for expansion and contraction as well as a constant air circulation and an application in which no solder is used. If you have devised a successful method of locking which prevents leaks and buckling and retains its permanence as a rooffing structure you have undoubtedly a roof that should be of considerable interest.

"The Bureau will be glad to be informed of any results you have had with aluminum roofing which you would care to furnish as we are interested in keeping up to date on all such metal problems."

The following is an excerpt from a letter from Aluminum Company of America, dated Chicago, Sept. 21st, 1921: "We are certain that aluminum roofing should prove to have a practically indefinite life under atmospheric conditions, provided that the joints you are going to use will allow free air circulation. If your joint has, as you say, constant air circulation, no trouble should be experienced.

"We note that you are using aluminum nails and also are protecting the aluminum roofing from contact with other metals, which is, we would say, the ideal condition.

"We might mention that we have aluminum electrical conductors in service for twenty years over the salt water of San Francisco Bay, and they are still practically unaffected by the weather conditions which are admitted to be the most severe possible. We also have always recommended aluminum conductors paralleling steam railway lines and it has been our experience that they last considerably better than copper or steel wires on account of the action of the sulphur from the coal on these metals. Sulphur has practically no effect on aluminum.

"We trust this will reassure you that an aluminum roofing properly jointed and put on should be an attractive and serviceable form of roofing."

Grade of Aluminum Used

Aluminum roofing and other products manufactured by American Aluminum Architecture Co., Aurora, Ill., are made of 24 gauge (.020″) 99% pure aluminum, especially tempered.

Qualities of Aluminum Proven

Aluminum speaks for itself. Its general uses are well known. It has been tested by the elements. The Washington Monument has had a cap of aluminum since 1884, which is still in a state of perfect preservation. This cap is a part of the lightning protective system, which suggests the value of aluminum roofing as a lightning protector. Aluminum is the only metal known which will withstand the sulphur in the smoke of locomotives, factories, etc. Aluminum has had many years service over salt water where it has successfully resisted those most severe atmospheric conditions. It is, therefore, the ideal material for roofing.

Of Interest to Railroad Officials

The attention of railroad officials is called to aluminum roofing because it is sulphur-proof and will last indefinitely. The price of aluminum per square foot (on account of its light weight) does not make it prohibitive on the modest railroad station, and its attractiveness, as well as its permanency, makes it the most appropriate roofing for the multi-million dollar terminal, as well.

100% Efficiency

On account of the permanence, silvery appearance, and other exceptional qualities of aluminum, as well as its easy application, assured by the mechanical construction of the

RIDGDOWN shingles as described, it is *The Roofing Par Excellence* for the most exclusive residences, churches, school buildings, club-houses, public buildings, spires, domes, towers, etc.

No Maintenance—No Renewal

Aluminum RIDGDOWN shingles and aluminum corrugated roofing have all the features and qualities that make a successful roof covering. There is no maintenance cost to be considered, they do not need to be painted or protected in any way. They last indefinitely.

Comparative Weights

It is well known that aluminum is the lightest metal in practical use. Compared with slate or tile, aluminum is but a feather in weight. Aluminum roofing weighs only 40 pounds per 100 sq. ft. or approximately 4% that of tile and about 7% that of slate. This suggests immediately the saving of material in roof construction and throughout the building. Another point to be considered in connection with the weight is the re-roofing of such residences as illustrated. Generally the roof supports of this type of residence are not strong enough to carry a heavy high-priced roof covering, yet the owner desires a real roof and in many cases incurs the expense of reinforcing the roof construction and even the frame of the house in order to carry the weight of a tile or slate roof.

The Advantages of Sloping Roofs

The use of flat roofs has always been a source of trouble, due to the fact that no satisfactory roof-covering has been available for flat surfaces. Pockets are frequently formed by warping of the roof boards, which hold water and snow and cause leaky roofs.

Residence of William D. Foulke, Aurora, Illinois
The First Building In The World Roofed With Aluminum

Modern architects are familiar with these drawbacks, and have overcome them by making their building plans call for sloping roofs, thus returning to the correct fundamental design of a roof whose function is to shed water.

Buildings now having flat roofs can be altered advantageously by adding a false roof with pitch of at least four inches to the foot, to be covered with our RIDGDOWN shingles. Such changes would not be costly and would afford an immense saving in the long run.

Comparative Costs

Aluminum roofing compares in cost with slate and tile roofs; costs much less than copper, and has the combined advantages of all roofings with none of their shortcomings. Moreover, the total expense of the roofing is materially reduced by the light weight of aluminum; by the saving of labor in putting it on; by the saving of lumber or steel in

roof construction; by the elimination of upkeep expenses for repairs, painting, etc.; by the elimination of incidental expenses, such as the re-decoration of rooms discolored by leaks; and, last but not least, by the salvage value of the roofing when the building is to be demolished. It is unquestionably the best roofing on the market.

The Advertising Value

The publicity value of aluminum roofing, on account of this novel and unique use for aluminum, is tremendous. Those interested in gaining the attention of the public will thoroughly appreciate this feature.

Service

On request we will furnish expert advice on roofing problems. We invite correspondence in regard to roofing on buildings now in existence, under construction or contemplated, with plans and sketches enclosed for estimating purposes. Plans will be returned promptly with estimates or advice, without charge.

Patents

Various patents are pending on articles described in this catalogue. Manufacturer's rights under them if issued will be maintained.

The Ideal Roof

Aluminum shingles! What do they suggest? A roof covering of highest type and quality, of elegance, refinement and beauty. A roofing unique in construction, indestructible, fire and lightning protective. First cost the only cost. Furthermore, should the house ever be torn down, the scrap value would be about 20% of the original cost of the roofing, or the shingles could be removed easily and placed on a new building. Is there any other roof in the world of similar value?

RIDGDOWN SHINGLES

The Ridgdown Shingle is Adaptable For Use on Towers, Dormers, Etc.

Siding

Aluminum for siding is beyond question the least expensive when one considers the qualities of aluminum, and that first cost is only cost. It needs no painting or upkeep. A fit siding for grain-elevators, farm barns, pent-houses, warehouses, factory buildings, etc.

Either RIDGDOWN or the CORRUGATED ALUMINUM may be used for this purpose.

Ask for information.

MADE OF ALUMINUM

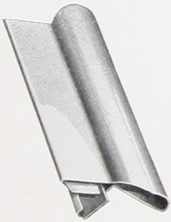
Roof Accessories

Cuts are shown herewith of the AAA ridges, hips, and valleys made of 99% pure aluminum.

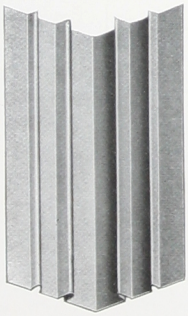
These can be furnished without pockets for use with any other roof material.

The superiority of aluminum for this service over any other material is apparent.

Ridge Coping



Hip Covering



Valley